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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHERMAN, STEPHEN G

ART UNIT PAPER NUMBER

2629

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,520

Applicant(s)

KATZ, MICHAEL

Examiner

Stephen G. Sherman

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the hinge connection as claimed in claims 4 and 5, which is explained in the specification to be connected to the stylus cavity, with respect to the stand, which is stated in the specification to also be connected to the stylus cavity, as claimed in claims 1 and 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 4, 5 and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 4 and 5 both state that the PDA and keyboard are hingedly connected together while the stand supports the PDA. Page 6, lines 4-12 of the specification state that the stand is inserted into stylus cavity 104 of the PDA, while page 6, lines 14-24 state that the hinge is also inserted into the stylus cavity to connect the keyboard to the PDA. The specification and drawings provide no support for allowing "one of ordinary skill" in the art to ascertain how the stand and hinge are both inserted into the stylus cavity 104 at the same time.

Claim 8 depends from claim 5 and further states that part of the hinge is placed inside of the stylus cavity, which as explained above is not enabled by the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "may be pivoted" renders the claim indefinite because it is unclear whether the rigid elongated element is or is not pivoted.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim (US 6,351,372).

Regarding claim 1, Kim discloses a combination of a wireless folding keyboard for a personal digital assistant and a stand for supporting said personal digital assistant

(Figure 1, item 12 is a wireless keyboard for personal digital assistant 10 and 26 is a stand as explained in column 2, lines 43-58 and column 3, lines 4-9. The examiner understands that the keyboard is moveable with respect to the PDA 10 and would fold into a closed position as shown in Figure 2.), wherein

said personal digital assistant has a first port for wireless communication and said folding keyboard comprises a second port for wireless communication (Column 3, line 60 to column 4, line 4 explain that the PDA 10 had an IR port 30 and that the keyboard has an IR port 52), and

said stand is adapted to support said personal digital assistant in an orientation whereby said first and second port are in wireless communication with each other (Figure 1 shows that the stand 26 when propped in the extended position allows for the communication between the IR ports 30 and 52.), and

wherein said keyboard further comprises a battery (Column 3, lines 65-66 explain that the keyboard is powered by a disc Li-ion battery.) a plurality of keys (Figure 1 shows that keyboard 12 has keys 50.) and computer software for wirelessly communicating a keystroke signal from said second port when a key is struck (Column 3, line 60 to column 4, line 4 explain that the mechanism and circuitry, which the examiner understands would require software, for generating the coded IR signals is present in the keyboard for it to be able to communicate with the PDA, the specifics just aren't dealt with in detail since it is well known to do so.).

Regarding claim 2, Kim discloses the combination of claim 1 wherein said wireless communication comprises infrared communication and said first and second ports are infrared ports (Refer to the rejection of claim 1.).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,351,372) in view of Winkler (US 5,345,362).

Regarding claim 3, Kim discloses the combination of claim 1.

Kim fails to teach wherein said stand for supporting a personal digital assistant comprises a stylus-shaped element having a first end sized to be removably received in a stylus-receiving cavity of said personal digital assistant, and a rigid elongated element pivotally connected to said first end, whereby when said first end is received in said stylus-receiving cavity said rigid elongated element may be pivoted to support said personal digital assistant in an orientation whereby said first and second port are in wireless communication with each other.

Winkler discloses wherein a stand for supporting a portable computer (Figure 15) comprises a stylus-shaped element having a first end sized to be removably received in a cavity of said portable computer (Figure 15 shows that item 88 is a stylus-shaped element which has a first end that is removably received in the cavity of a rear housing 82 as explained in column 8, line 62 to column 9, line 4. The examiner considers anything of a cylinder like shape to be stylus shaped.), and

a rigid elongated element pivotally connected to said first end (Figure 15 shows that item 64 is connected to the first end 88 and is pivotable to the opening in the housing 82.),

whereby when said first end is received in the cavity said rigid elongated element may be pivoted to support said portable computer (Figure 14a-c show that when the element 88 is received into the opening in the housing that the item 64 can be pivoted to support the portable computer.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to replace the stand as taught by Kim with the stand taught

by Winkler such that the stand could be received in a cavity in the PDA to support the PDA to allow for the IR ports to communicate in order to allow for the adjustment of the display of the PDA to be adjusted to a plurality of different viewing angles as desired.

11. Claims 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,351,372) in view of Coulon et al. (US 5,712,760).

Regarding claim 4, Kim discloses the combination of claim 1 wherein said stand supports said personal digital assistant in an orientation to permit wireless communication between said first and second ports (Please refer to the rejection of claim 1.).

Kim fails to teach wherein the personal digital assistant is hingedly connected to said folding keyboard.

Coulon et al. disclose wherein a personal digital assistant is hingedly connected to a keyboard (Figures 1a-1e show a keyboard 106 connected to PDA 100 by hinge 114 as explained in column 4, lines 3-45.).

Therefore it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to make the keyboard and PDA as taught by Kim hingedly attached to one another as taught by Coulon in order to allow for the use of a full size keyboard without sacrificing the light weight and compactness normally associated with smaller portable computers.

12. Claims 5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,351,372) in view of Winkler (US 5,345,362) and further in view of Coulon et al. (US 5,712,760).

Regarding claim 5, Kim and Winkler disclose the combination of claim 3.

Kim and Winkler fail to teach that the combination further comprises a hinge to removably and hingedly connect said personal digital assistant to said folding keyboard in an orientation to permit wireless communication between said first and second ports.

Coulon et al. disclose wherein a personal digital assistant is removably and hingedly connected to a keyboard (Figures 1a-1e show a keyboard 106 connected to PDA 100 by hinge 114 as explained in column 4, lines 3-45. The examiner interprets that if hinge 114 was removed that the keyboard would be removable.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to make the keyboard and PDA as taught by Kim and Winkler hingedly attached to one another as taught by Coulon in order to allow for the use of a full size keyboard without sacrificing the light weight and compactness normally associated with smaller portable computers.

Regarding claim 8, Kim, Winkler and Coulon et al. disclose the combination of claim 5.

Coulon et al. also disclose wherein said hinge comprises a stylus-shaped rod which is sized and shaped to fit into the stylus cavity of said personal digital assistant

(Column 4, lines 42-45 explain that the hinge 144 is formed with the pen holder cavity 116 as shown in Figure 1a, where the hinge 114 as shown in Figure 1b is stylus shaped. As explained above, the examiner considers anything cylindrical to be "stylus shaped.").

Regarding claim 9, Kim, Winkler and Coulon et al. disclose the combination of claim 5.

Coulon et al. also disclose wherein said hinge when removably installed on said keyboard thereby locks said keyboard in an open position (As explained in the rejection of claim 5, the examiner interprets that when the hinge 114 is removed that the keyboard would be separated from the PDA. Then when the hinge 114 is installed to connected the PDA and keyboard together, the keyboard can be locked into an open position as shown in Figure 1a such that the keyboard can be used.).

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,351,372) in view of Winkler (US 5,345,362) and further in view of Huilgol et al. (US 6,522,529).

Regarding claim 6, Kim and Winkler disclose the combination of claim 3.

Kim and Winkler fail to teach wherein the screen display of the personal digital assistant is rotated 90 degrees.

Huilgol et al. disclose wherein a screen display of a personal digital assistant is rotated 90 degrees (Figure 2 shows that that the display 12 is rotatable to 90 degrees as explained in column 4, lines 36-64.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to make the display screen of the PDA taught by the combination of Kim and Winkler rotatable as taught by Huilgol et al. in order to allow a user to rotate the display in a manner suitable to their viewing position without exposing screen electrical connections to excess stress.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,351,372) in view of Coulon et al. (US 5,712,760) and further in view of Huilgol et al. (US 6,522,529).

Regarding claim 7, Kim and Coulon et al. disclose the combination of claim 4.

Kim and Coulon et al. fail to teach wherein the screen display of the personal digital assistant is rotated 90 degrees.

Huilgol et al. disclose wherein a screen display of a personal digital assistant is rotated 90 degrees (Figure 2 shows that that the display 12 is rotatable to 90 degrees as explained in column 4, lines 36-64.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to make the display screen of the PDA taught by the combination of Kim and Coulon et al. rotatable as taught by Huilgol et al. in order to

allow a user to rotate the display in a manner suitable to their viewing position without exposing screen electrical connections to excess stress.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS

20 April 2006

AMR A. AWAD
PRIMARY EXAMINER
